

**BEFORE THE  
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION  
UNITED STATES DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D.C.**

Notice of Proposed Rulemaking for Liquefied	)	Docket No. RSPA-03-14456
Natural Gas: Clarifying and Updating Safety	)	Notice 1 RIN 2137-AD80
Standards	)	

**COMMENTS OF THE AMERICAN GAS ASSOCIATION ON  
CLARIFYING AND UPDATING THE LIQUEFIED NATURAL GAS REGULATIONS**

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The American Gas Association represents 191 local energy utility companies that deliver natural gas to more than 53 million homes, businesses and industries throughout the United States. AGA member companies account for roughly 83 percent of all natural gas delivered by local natural gas distribution companies. Natural gas meets one-fourth of the United States' energy needs and is the fastest growing major energy source.

AGA also provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international gas companies, and industry associates. In regards to the LNG proposed rule, AGA is advocating on behalf of 75 LNG plants operated by distribution and pipeline companies. The majority of these plants are used for peak shaving which increases gas delivery capacity during periods of high demand. These 75 plants account for approximately 89% of the LNG storage capacity reported to RSPA.

AGA respectfully submits these comments to the Research and Special Programs Administration (RSPA) to address the Notice of Proposed Rulemaking (NPRM) concerning the LNG regulations.

**General Comments**

AGA commends RSPA for its efforts in addressing LNG regulations at this time. AGA is well aware that RSPA is currently addressing numerous resource intensive regulatory initiatives such as pipeline integrity, operator qualification, public communication, and mapping. RSPA's commitment to address LNG regulations at this time demonstrates that RSPA understands the positive impact that changes to the LNG safety regulations, can have on the outlook of our nation's energy supply. For AGA LDC members, LNG provides critical peak-shaving gas supply and is increasingly becoming an important source of base-load gas supply through LNG import terminals.

AGA believes that the most important change to the LNG regulations that will help address these areas, is the adoption of the 2001 edition of the NFPA 59A standard with

regard to the siting, design, installation, and construction of new LNG facilities. RSPA is proposing to make such a change in the current NPRM, which AGA supports.

There are some additional changes that RSPA is proposing that are of concern. The changes that concern our members are summarized below and discussed in more detail under “Specific Comments to Proposed Changes.”

Changes of concern:

- Proposal to clarify that §§ 193.2521, 193.2619(c), 193.2639(a) and subpart I — Fire Protection apply to LNG facilities existing or under construction on March 31, 2000. AGA does not agree with this proposal.
- Proposal under §193.2017, to require that plans and procedures required under Part 193, be reviewed at intervals not exceeding 15 months but at least once each calendar year. AGA suggests reviews be conducted every 2 years.
- Proposal under §193.2717, to require fire drills to include evacuation of buildings. AGA does not agree with this proposal and suggests that RSPA provide a recommended, rather than mandated, list of fire drill activities.

### **Specific Comments to Proposed Changes**

RSPA’s proposed changes are listed below and numbered according to the changes proposed in the NPRM. Underlined text indicates RSPA’s proposed language addition and strikethrough text indicates RSPA’s proposed deletions. AGA’s comments are presented under each proposed change.

1. Authority citation continues to read as follows:

*Authority: 49 U.S.C. 5103, 60102, 60103, 60111, 60118, and 49 CFR 1.53.*

Comment: No changes are proposed – no comment.

## 2. §193.2005 Applicability.

*(a) Standards in this part governing siting, design, installation, or construction of LNG facilities do not apply to LNG facilities existing or under construction before the date such standards take effect under this part. Safety requirements mandating compliance with standard ANSI/NFPA 59A and other changes in this part governing siting, design, construction, equipment, fire protection, operation and maintenance apply to LNG facilities placed in service after March 31, 2000 unless otherwise noted.*

### Comments.

AGA does not have any concern with the general retroactive requirements regarding operations and maintenance except as otherwise noted in these comments (i.e. plans and procedures, and training)

In regards to the term “under construction”, there is concern that a new facility not yet under construction, but that has received approval for construction from the appropriate government agencies, would have to comply with new regulations that become effective after the date of the approval for construction. AGA does not believe this is RSPA’s intent. AGA suggests that RSPA utilize the regulatory language similar to what was in §193.2005(a)(1) and (a)(2) before the March 1, 2000 final rule. This section stated the following:

### §193.2005(a)

*(a) Safety requirements mandating compliance with standard ANSI/NFPA 59A and other changes in this part governing siting, design, construction, equipment, fire protection, operation and maintenance apply to LNG facilities placed in service after March 31, 2000 unless otherwise noted. New or amended standards in this part governing the siting, design, installation, or construction of an LNG facility and related personnel qualifications and training do not apply to:*

- (1) LNG facilities under construction before the date such standards are published; or*
- (2) LNG facilities for which an application for approval of the siting, construction, or operation was filed before March 1, 1978, with the Department of Energy (or any predecessor organization of that Department) or the appropriate State or local agency in the case of any facility not subject to the jurisdiction of the Department of Energy under the Natural Gas Act (not including any facility the construction of which began after November 29, 1979, not pursuant to such an approval).*

*(b) ...*

*(1)...*

*(2)...*

AGA suggests specific language for RSPA to consider for §193.2005(a) further below.

With regard to fire protection requirements, AGA does not agree with RSPA’s proposal to make the fire protection requirements in the NFPA 59A 2001 edition retroactive to existing LNG facilities. The main concern is that the fire protection requirements in 59A are very different from the previous fire protection requirements in Part 193.

For example, NFPA 59A section 9.7.2 states personnel " shall be equipped with the

necessary protective clothing and equipment and qualified in accordance with NFPA 600, "Standard on Industrial Fire Brigades". It is unclear as to whether this implies that existing LNG facilities have to comply with NFPA 600 even though fire brigades are not currently part of their fire protection plan. Many LNG operators do not use fire brigades with their plant personnel but rely on the local fire emergency departments.

Another concern with this retroactive requirement is that it is unclear as to whether existing LNG facilities need to comply with the fire protection operations and maintenance requirements in 59A. NFPA 59A, section 9-3.4 requires that fire and gas systems be tested and maintained in accordance with NFPA 72. This standard establishes various testing frequencies, methods, and qualifications that those working on the systems must have. The requirements in the standard implies that many LNG plant operators could not test and maintain such systems.

The final rule issued on March 1, 2000 was very clear stating that the changes to operations, maintenance, and fire protection did not apply to existing LNG facilities. While RSPA indicates in the NPRM issued on May 1, 2003, that "no such exclusion" of operations, maintenance, and fire protection requirements for existing LNG facilities was intended, RSPA has not provided any public notice on this intent. AGA agrees with the original legislative authority referred to by RSPA under 49 U.S.C. 60103(d). However, this was for the authorization of the original publication of the LNG regulations in Part 193 in 1980. The current proposal to make the fire protection requirements in the 2001 edition of the NFPA 59A standard retroactive goes beyond the Congressional intent referenced by RSPA.

The introduction of the NFPA 59A standard even states under section 1-1.2 Retroactivity:

*Where existing plants, equipment, buildings, structures, and installations meet the applicable design, fabrication, or construction layout provisions of the edition of this standard that was in effect at the time of installation, they can be continued in use, provided they do not constitute a distinct hazard to life or adjoining property.*

If RSPA is intent on making the fire protection requirements retroactive, RSPA needs to provide industry and the public more time to review the specific impacts of doing so. This should be done under a separate rulemaking.

Based on the discussion above, AGA suggests the following language for §193.2005(a):

*§193.2005(a)*

*(a) Standards in this part governing siting, design, installation, construction, or fire protection of LNG facilities do not apply to:*

- (1) Existing LNG facilities; or*
- (2) LNG facilities under construction before the date such standards take effect under this part; or*
- (3) LNG facilities for which an application for siting, construction, or operation was filed with the appropriate government agency.*

3. §193.2017(c) Plans and Procedures. (new paragraph)

*(c) Each operator must review and update the plans and procedures required by this part at intervals not exceeding 15 months, but at least once each calendar year.*

Comments.

Requiring a periodic review of plans and procedures is appropriate. However, an annual review may be too restrictive given the fact most LNG facilities do not encounter significant changes in their operations from year to year. Requiring a review at intervals every 2 years, but not to exceed 27 months, may be more appropriate since operations and maintenance personnel are required to receive training on appropriate plans and procedures every 2 years under 193.2713(b). In addition, requiring a review of plans and procedures would be appropriate whenever there is a significant change in facilities (i.e. installation of new equipment, removal of old equipment, etc.).

4. §193.2019(a) Applicability.

*(a) Mobile and temporary LNG facilities for peakshaving application, for service maintenance during gas pipeline systems repair/alteration, or for other short term applications need not meet the requirements of this part if the facilities are in compliance with applicable sections of NFPA 59A (1996 edition).*

Comments.

This is an appropriate change to this section.

## 5. §193.2503 Operating Procedures.

*Each operator shall follow one or more manuals of written procedures to provide safety in normal operation and in responding to an abnormal operation that would affect safety. The procedures must include provisions for:*

- (a) Monitoring components or buildings according to the requirements of §193.2507.*
- (b) Startup and shutdown, including for initial startup, performance testing to demonstrate that components will operate satisfactory in service.*
- (c) Recognizing abnormal operating conditions.*
- (d) Purging and inerting components according to the requirements of §193.2517.*
- (e) In the case of vaporization, maintaining the vaporization rate, temperature and pressure so that the resultant gas is within limits established for the vaporizer and the downstream piping;*
- (f) In the case of liquefaction, maintaining temperatures, pressures, pressure differentials and flow rates, as applicable, within their design limits for:*
  - (1) Boilers;*
  - (2) Turbines and other prime movers;*
  - (3) Pumps, compressors, and expanders;*
  - (4) Purification and regeneration equipment; and*
  - (5) Equipment within cold boxes.*
- (g) Cooldown of components according to the requirements of §193.2505; and,*
- ~~*(h) Compliance with §193.2805(b).*~~

Comments.

This is an appropriate change to this section.

## 6. §193.2507 Monitoring Operations.

*Each component in operation or building ~~determined under §193.2805(a)(2)~~ in which a hazard to persons or property could exist must be monitored to detect fire or any malfunction or flammable fluid ~~which that~~ could cause a hazardous condition. Monitoring must be accomplished by watching or listening from an attended control center for warning alarms, such as gas, temperature, pressure, vacuum, and flow alarms, or by conducting an inspection or test at intervals specified in the operating procedures.*

Comments.

This is an appropriate change to this section.

## 7. §193.2509(b) Emergency Procedures.

- (b) To adequately handle each type of emergency identified under paragraph (a) of this section and each fire emergency ~~identified under §193.2817(a)~~, each operator shall follow one or more manuals of written procedures. The procedures must provide for the following:*

Comments.

This is an appropriate change to this section.

8. §193.2605(b)(2) Maintenance Procedures.

*(2) A description of other actions necessary to maintain the LNG plant in accordance with the requirements of this subpart ~~and §193.2805.~~*

Comments.

This is an appropriate change to this section.

9. §193.2705(b) Construction, installation, inspection, and testing.

*(b) Each operator must periodically determine whether inspectors performing ~~duties under §193.2307 construction, installation, and testing duties required by this part~~ are satisfactorily performing their assigned functions.*

Comments.

This is an appropriate change to this section.

10. §193.2717 Training: fire protection.

*(a) All personnel involved in maintenance and operations of an LNG plant, including their immediate supervisors, must be trained in accordance with a written plan of initial instruction, including plant fire drills, to:*

*~~(1) Know and follow the fire prevention procedures under §193.2805(b);~~*

*~~(21) Know the potential causes and areas of fire determined under §193.2805(a);~~*

*~~(32) Know the types, sizes, and predictable consequences of fire; determined under §193.2817(a);~~*  
*and,*

*(4) Know and be able to perform their assigned fire control duties according to the procedures established under §193.2509 and by proper use of equipment provided under §193.2817~~2801~~.*

*(b) A written plan of continuing instruction, including plant fire drills, must be conducted at intervals of not more than 2 years to keep personnel current on the knowledge and skills they gained in the instruction under paragraph (a) of this section.*

*(c) Plant fire drills must include –*

*(1) Evacuation of buildings; and*

*(2) Personnel performing fire control duties.*

Comments.

The deletion of references to sections 193.2805 and 2817 are appropriate. It is inappropriate however, for RSPA to specify which actions must be included in a fire drill. There are many ways for operators to conduct effective fire drills. Restricting operators to specific requirements is burdensome and ineffective. A suggested list is more appropriate. RSPA should use language such as “fire drills may include, but are not limited to, ....” in this section.

Tabletop fire drills are recognized nationally as a prominent method for training and procedural analysis and evaluation, particularly by federal and state emergency management agencies and local fire departments. This type of training could be adequate, depending on the many variables regarding the size, siting, and design of

LNG plants. In addition, state and local fire departments, agencies, and others, have developed many classroom courses and field locations for providing education and hands-on training for fire department and LNG operator personnel regarding natural gas, liquefied petroleum gas, and LNG.

Lastly, clarification is needed for (c)(2) that states “personnel performing fire control duties”, because it is unclear as to what is intended. This requirement could be interpreted to require that either fire control personnel have to be present for the drill or it could be interpreted to require participants in the drill to perform fire control duties even though they are not the responsible fire control personnel. This could be clarified simply by providing suggesting a list of things to include in a fire drill as suggested previously.

#### 11. §193.2717 Section II E of Appendix A

1. ANSI/NFPA 59A "Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)" (~~1996~~-2001 edition).

Comments.

This is an appropriate change to this section.

#### **Other Comments**

In previous comments to RSPA regarding LNG regulations, AGA has urged RSPA to adopt more of the NFPA 59A standard rather than adopt the standard in a piece-meal approach. Operators are still having to comply with the requirement in Part 193, NFPA 59A, and if applicable, state LNG regulations. Utilizing 2-3 sets of standards makes code compliance somewhat of a challenge, particularly due to the manner in which NFPA 59A has been adopted. Various sections of Part 193 have simply been deleted with no reference to the applicable section in NFPA 59A. .

A lot of the confusion and challenges in identifying the exact code requirements, can be eliminated with more adoption of the NFPA 59A standard. AGA understands however, that RSPA is not now adopting more of the NFPA 59A standard because of various concerns with the requirements in the standard.

To address RSPA and industry’s concerns, AGA is committed to working with RSPA and other stakeholders to help ensure that most, if not all, of the 2005 edition of the NFPA 59A standard can be incorporated into Part 193. AGA believes that this can be accomplished primarily by working together through the NFPA 59A committee.



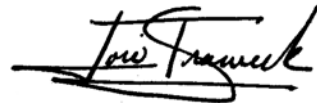
### **Conclusion**

As previously stated, AGA commends RSPA for undertaking the initiative to address the LNG safety regulations at this time. AGA supports the incorporation of the NFPA 59A standard with regard to the siting, design, installation, and construction of new LNG facilities. This will enable new facilities to utilize the latest technology which will not only enhance safety, but also reduce costs.

AGA is concerned with requiring existing facilities to comply with the fire protection requirements of the NFPA 59A standard. AGA believes that RSPA should not pursue this change at this time, but pursue this under a separate rulemaking to provide LNG operators sufficient opportunity to determine the impact of this change. AGA is also concerned with propose changes regarding the review of plans and procedures and with fire training requirements.

Lastly, AGA is committed to working with RSPA to address the challenges faced by LNG operators in determining which standard or code they have to comply with. This challenge is caused by the piece meal approach of adopting portions of the NFPA 59A standard into Part 193.

Respectfully submitted,  
THE AMERICAN GAS ASSOCIATION  
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By: \_\_\_\_\_  
Lori S. Traweck  
Senior Vice President  
American Gas Association

For further information on these comments, please contact:

Paul P. Gustilo, P.E.  
Managing Director, Technical Services  
American Gas Association  
400 N. Capitol Street, N.W.  
Washington, D.C. 20001  
(202) 824-7335